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## NOTICE OF ALLOWANCE AND FEE(S) DUE

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03/19/2009

THE GOODYEAR TIRE & RUBBER COMPANY INTELLECTUAL PROPERTY DEPARTMENT 823 1144 EAST MARKET STREET AKRON, OH 44316-0001

EXAMINER

PETERSON, KENNETH E

ART UNIT PAPER NUMBER

3724

DATE MAILED: 03/19/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,348	08/28/2003	Daniel Ray Downing	DN2001124D01	6674

TITLE OF INVENTION: METHOD FOR CUTTING ELASTOMERIC MATERIALS

	APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
•	nonprovisional	NO	\$1510	\$0	\$1370	\$1510	06/19/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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If the SMALL ENTITY is shown as NO:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

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10/650,348	08/28/2003		Daniel Ray Downin	g	•	D	N2001124D01		6674
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10/650,348	8 08/28/2003 Daniel Ray Downing		DN2001124D01	6674	
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THE GOODYE	AR TIRE & RUBBEI	PETERSON, KENNETH E			
	PROPERTY DEPART	EMENT 823	ART UNIT	PAPER NUMBER	
1144 EAST MAR AKRON, OH 443			3724	0	

### Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)			
A1 (1	10/650,348 DOWNING, DANIEL		L RAY		
Notice of Allowability	Examiner	Art Unit			
	3724				
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to	olication. If not includ will be mailed in due	ed course. <b>THIS</b>		
1. $igtimes$ This communication is responsive to <u>the paper filed 02 feb</u>	<u>09</u> .				
2. ☑ The allowed claim(s) is/are <u>2,3,22 <i>and</i> 37</u> .					
3. Acknowledgment is made of a claim for foreign priority unall All b) Some* c) None of the:  1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:	been received. been received in Application No		ition from the		
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the re	quirements		
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5. 🔀 CORRECTED DRAWINGS ( as "replacement sheets") mus	et be submitted.				
(a) including changes required by the Notice of Draftspers	on's Patent Drawing Review ( P <b>T</b> O-	948) attached			
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date					
(b)   including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the O	office action of			
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			e back) of		
<ol> <li>DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT</li> </ol>			Note the		
Attachment(s)					
1. ☐ Notice of References Cited (PTO-892)	5. Notice of Informal Page 1	atent Application			
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 6. ☐ Interview Summary (PTO-413), Paper No./Mail Date					
3. ☐ Information Disclosure Statements (PTO/SB/08),  Paper No./Mail Date					
4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. ☐ Examiner's Statement of Reasons for Allowa of Biological Material					
9.					
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1. Applicant's movie cd received in August of '07 has been cleared for viewing, and Examiner has viewed it.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with June Rickey on 12 March 09.

Firstly, a history of amendments to the specification and drawings;

The amendments to the specification filed 28 August 03 have been entered.

The amendments to the specification filed 14 June 04 are a duplicate of the 28 Aug 03 amendment and will be ignored.

The amendments to the specification filed 04 October 04 have been entered.

The amendments to the specification filed 27 August 07 will not be entered, as this subject matter will be dealt with in the below Examiner's amendment.

The amendments to the specification filed 03 March 08 will not be entered, as figure 7 has been retained.

The amendments to the drawings filed 27 August 07 have been entered. It has been determined that they do not constitute new matter.

The amendments to the drawings filed 31 October 07 will not be entered, since figure 7 has been retained.

The application has been amended as follows:

On line 3 of page 1 of the specification, as amended 04 October 04, after "09/874,766", the following has been inserted --, now patent number 6,755,105--.

On line 6 of paragraph 0013, " $\theta$  relative to the strip cutting path" has been changed to -- $\alpha$  relative to a first anvil surface--.

Paragraph 0014 has been changed as follows;

[0014] The step of supporting the strip may further include supporting the strip on a horizontal support surface at an angle  $\theta$ 1 less than the skive angle  $\alpha$  on one side of the cutting path and at an angle  $\theta$ 2 greater than or equal to the skive angle  $\alpha$  on the opposite side of the cutting path. This causes the location of the impacted cord to occur approximately at the location wherein the supporting angle changes from  $\theta$ 1 to  $\theta$ 2.

On line 4 of paragraph 0015,  $\theta$ 1 was changed to  $\theta$ 2 in the amendment filed 28 August 03, and has now been changed to just -- $\theta$ --.

Paragraph 0017 has been changed as follows;

[0018] An apparatus for cutting segments from a strip of multi-layered elastomeric material containing reinforcing cords, the cords being substantially parallel and more or less oriented in the direction of the cut path, is described by the following features. A cutting element for cutting the strip to form cut ends has a cutting edge oriented to cut along a line 3, the line 3 being tangent to one or more cords and inclined at a desired skive angle  $\alpha$ , and relative to a means for supporting the strip along the cutting path, the means for supporting the strip having a first horizontal surface oriented at an angle  $\theta 1$ 

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less than the skive angle  $\alpha$ , and a second surface oriented at an angle  $\theta$ 2 relative to the first surface,  $\theta$  being greater than or equal to the skive angle  $\alpha$ , and a means for restraining the strip against the means for supporting, the means for restraining the strip preferably lying ahead of the cutting element, and being moveable. The apparatus further has a means for moving both the cutting element and the means for restraining during the cutting of the strip. In one embodiment, the apparatus has the cutting element having a cutting edge inclined at an acute angle  $\alpha$  relative to the width of the strip. The cutting edge when oriented as described initiates cutting on the surface furthest away from the means for supporting the strip. The skive angle  $\alpha$  is normally set about 10° or less relative to the first support surface, forming a cut path adjacent to one or more cords of the strip being cut. While the means or supporting the strip has two surfaces inclined an angle  $\theta$ , at angles  $\theta$ n, and  $\theta$ 2 respectively,  $\theta$ 1 is preferably set about 2° less than the skive angle  $\alpha$ , the angle  $\theta$ 2 is about 2° more than the skive angle  $\alpha$ . In one embodiment the skive angle  $\alpha$  is set to about 8°.

Paragraph 0043 has been changed as follows;

[0043] As shown, the cutting element (120) is an ultrasonic blade. The ultrasonic blade initiates cutting to one side of the elastomeric strip (1) while the strip is supported on a supporting means (110). The supporting means (110) is preferably an anvil that has an outer surface adjacent to the cord reinforced tire component. This outer surface preferably has a first horizontal surface (111) inclined at the angle of  $\alpha$  relative to a lower surface (122) of the blade an angle of  $\theta$ 1,  $\theta$ 1 being less than the skive angle  $\alpha$ . A second surface (112) is provided wherein the second surface (112) is inclined at an

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angle  $\theta$ 2,  $\theta$ 2 being at an angle relative to the first surface equal to or greater than the skive angle  $\alpha$ . As illustrated, the cord reinforced tire component (20) is adjacent to the surfaces (111, 112). As can be seen, the ultrasonic blade (120) is positioned at a slight distance (d) spaced above the anvil (110). That distance creates a gap (d) of approximately 0.0030 inch. This gap (d) is sufficient to allow the cord reinforced tire component (20) to pass under the ultrasonic blade (120) during the cutting procedure.

On line 3 of paragraph 0044, "prior to meeting with the cord reinforced component (20). The" has been changed to --. Shortly after initial contact, the impact of the blade causes the cord reinforced layer to lift away from the second surface (112), at which point the--.

On lines 1 and 2 of paragraph 0047, "an angle  $\theta$ 1 at one surface (111) to angle  $\theta$ 2 at" has been changed to –the first surface (111) by angle  $\theta$  to--.

On line 7 of paragraph 0047, " $\theta$ 2" has been changed to  $-\theta$ --.

In paragraph 0048, the first sentence (With reference.....second angle  $\theta$ 2) has been deleted.

Claims 1,4,5 and 20 have been deleted.

On line 1 of claim 2, "1" has been changed to -37--.

On line 1 of claim 3, "1" has been changed to -37--.

On line 1 of claim 22, "1" has been changed to -37--.

Claim 37 has been changed as follows;

37. (previously presented) A method of cutting a strip of elastomeric material into segments of a desired length, the strip having a width W, the strip being formed of a plurality of tire components, at least one of the tire components being a cord reinforced component, the cords being substantially parallel and oriented in the direction of a cutting path formed across the width W of the strip; the method comprising:

providing an anvil having a first angled surface, and a second angled surface, there being a first angle between the first and second surfaces, wherein a transition point is located at the intersection of the first angled surface and the second angled surface;

moving a cutting device into cutting engagement of the strip while supporting the strip on said anvil;

positioning the cutting edge of the cutting device at a skive angle less than 10 degrees relative to the <u>first surface</u>, <u>said skive angle being substantially equal to said first angle</u>, <u>said positioning being strip and</u> at a gap distance (d) above the transition point and above the second surface of the anvil, wherein the gap distance (d) is slightly less than or equal to the thickness of the cord reinforced component;

cutting through the entire strip in a single cutting step while maintaining the gap distance (d) and without cutting the cords, and forming a segment.

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3. The following changes to the drawings have been approved by the examiner and agreed upon by applicant:

In figures 5A,5B and 5C, as amended on 27 August 07, the symbols  $\theta$ 1 and  $\theta$ 2 will be deleted.

On the right hand side of one of figures 5A,5B or 5C, angle lines will be extended from the surfaces 111 and 112 and the angle between them will be labeled as  $\theta$ .

In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Peterson whose telephone number is (571)272-4512. The examiner can normally be reached on Monday-Thursday, 7:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571)272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kenneth Peterson/ Primary Examiner, Art Unit 3724